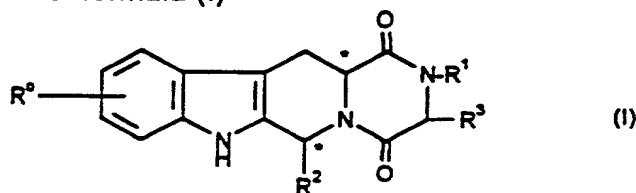


**CLAIMS**

1. A compound of formula (I)

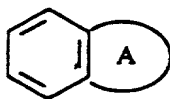


5 and salts and solvates thereof, in which:

$R^0$  represents hydrogen, halogen or  $C_{1-6}$  alkyl;

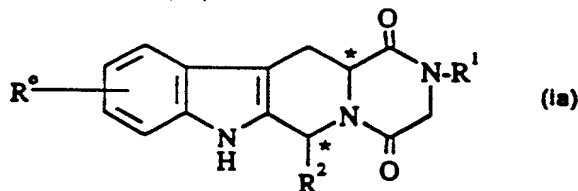
$R^1$  represents hydrogen,  $C_{1-6}$  alkyl,  $C_{2-6}$  alkenyl,  $C_{2-6}$  alkynyl, halo $C_{1-6}$  alkyl,  $C_{3-8}$  cycloalkyl,  $C_{3-8}$  cycloalkyl $C_{1-3}$  alkyl, aryl $C_{1-3}$  alkyl or heteroaryl $C_{1-3}$  alkyl;

10  $R^2$  represents an optionally substituted monocyclic aromatic ring selected from benzene, thiophene, furan and pyridine or an optionally



substituted bicyclic ring attached to the rest of the molecule via one of the benzene ring carbon atoms and wherein the fused ring A is a 5- or 6-membered ring which may be saturated or partially or fully unsaturated and comprises carbon atoms and optionally one or two heteroatoms selected from oxygen, sulphur and nitrogen; and  $R^3$  represents hydrogen or  $C_{1-3}$  alkyl, or  $R^1$  and  $R^3$  together represent a 3- or 4- membered alkyl or alkenyl chain.

- 20 2. A compound of formula (Ia)

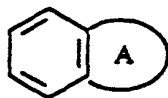


and salts and solvates thereof, in which:

$R^0$  represents hydrogen, halogen or  $C_{1-6}$  alkyl;

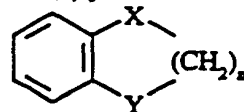
25  $R^1$  represents hydrogen,  $C_{1-6}$  alkyl, halo $C_{1-6}$  alkyl,  $C_{3-8}$  cycloalkyl,  $C_{3-8}$  cycloalkyl $C_{1-3}$  alkyl, aryl $C_{1-3}$  alkyl or heteroaryl $C_{1-3}$  alkyl; and

$R^2$  represents an optionally substituted monocyclic aromatic ring selected from benzene, thiophene, furan and pyridine or an optionally



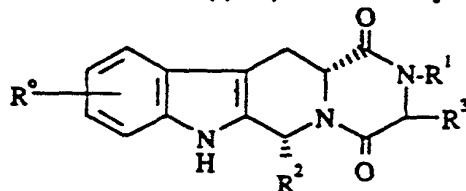
substituted bicyclic ring attached to the rest of the molecule via one of the benzene ring carbon atoms and wherein the fused ring A is a 5- or 6-membered ring which may be saturated or partially or fully unsaturated and comprises carbon atoms and optionally one or two heteroatoms selected from oxygen, sulphur and nitrogen.

3. A compound according to Claim 1 or 2, wherein  $R^0$  represents hydrogen.
4. A compound according to any of Claims 1 to 3, wherein  $R^1$  represents hydrogen,  $C_{1-4}$ alkyl, halo $C_{1-4}$ alkyl,  $C_{3-6}$ cycloalkyl,  $C_{3-6}$ cycloalkylmethyl, pyridyl $C_{1-3}$ alkyl, furyl $C_{1-3}$ alkyl or optionally substituted benzyl.
5. A compound according to any of Claims 1 to 3, wherein  $R^1$  and  $R^3$  together represent a 3-membered alkyl chain.
6. A compound according to any of Claims 1 to 4, wherein  $R^3$  represents hydrogen.
7. A compound according to any of Claims 1 to 6, wherein  $R^2$  represents an optionally substituted benzene, thiophene, furan, pyridine or naphthalene



ring or an optionally substituted bicyclic ring where n is 1 or 2 and X and Y are each  $CH_2$  or O.

8. A cis isomer of formula (I) represented by formula (Ib)



(Ib)

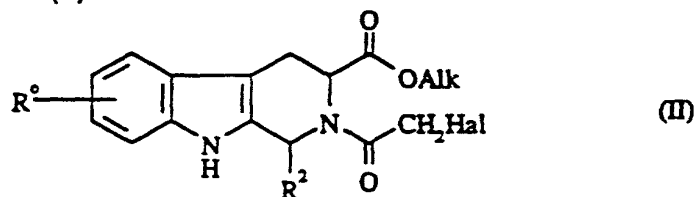
and mixtures thereof with its *cis* optical enantiomer, including racemic mixtures, and salts and solvates of these compounds in which  $R^0$  is hydrogen or halogen and  $R^1$ ,  $R^2$  and  $R^3$  are as defined in any preceding claim.

- 5
9. Cis-2,3,6,7,12,12a-hexahydro-2-(4-pyridylmethyl)-6-(3,4-methylenedioxyphenyl)-pyrazino[2', 1' : 6, 1]pyrido[3,4-b]indole-1,4-dione; Cis-2,3,6,7,12,12a-hexahydro-6-(2,3-dihydrobenzo[b]furan-5-yl)-2-methyl-pyrazino[2', 1' : 6, 1]pyrido[3,4-b]indole -1,4-dione;
- 10 Cis-2,3,6,7,12,12a-hexahydro-6-(5-bromo-2-thienyl)-2-methyl-pyrazino[2', 1' : 6, 1]pyrido[3,4-b]indole -1,4-dione;
- Cis-2,3,6,7,12,12a-hexahydro-2-butyl-6-(4-methylphenyl)-pyrazino[2', 1' : 6, 1]pyrido[3,4-b]indole -1,4-dione;
- (6R,12aR)-2,3,6,7,12,12a-Hexahydro-2-isopropyl-6-(3,4-methylenedioxyphenyl)-pyrazino[2', 1' : 6, 1]pyrido[3,4-b]indole -1,4-dione;
- 15 (6R,12aR)-2,3,6,7,12,12a-Hexahydro-2-cyclopentyl-6-(3,4-methylenedioxyphenyl)-pyrazino[2', 1' : 6, 1]pyrido[3,4-b]indole -1,4-dione;
- (6R,12aR)-2,3,6,7,12,12a-Hexahydro-2-cyclopropylmethyl-6-(4-methoxyphenyl)-pyrazino[2', 1' : 6, 1]pyrido[3,4-b]indole -1,4-dione;
- 20 (6R,12aR)-2,3,6,7,12,12a-Hexahydro-6-(3-chloro-4-methoxyphenyl)-2-methyl-pyrazino[2', 1' : 6, 1]pyrido[3,4-b]indole -1,4-dione;
- (6R,12aR)-2,3,6,7,12,12a-Hexahydro-2-methyl-6-(3,4-methylenedioxyphenyl)-pyrazino[2', 1' : 6, 1]pyrido[3,4-b]indole-1,4-dione;
- (6R, 12aR)-2,3,6,7,12,12a-Hexahydro-6-(3,4-methylenedioxyphenyl)-pyrazino[2', 1' : 6, 1] pyrido [3,4-b] indole-1,4-dione;
- 25 (5aR, 12R, 14aS)-1,2,3,5,6,11,12,14a-Octahydro-12-(3,4-methylenedioxyphenyl)-pyrrolo[1'',2'' : 4',5']pyrazino[2', 1' : 6, 1]pyrido[3,4-b]indole-5-1,4-dione;
- and physiologically acceptable salts and solvates thereof.
- 30
10. (6R,12aR)-2,3,6,7,12,12a-hexahydro-2-methyl-6-(3,4-methylenedioxyphenyl)-pyrazino[2', 1' : 6, 1]pyrido[3,4-b]indole -1,4-dione; and physiologically acceptable salts and solvates thereof.

- 5 11. A compound according to any of Claims 1 to 10, for use in the treatment of stable, unstable and variant angina, hypertension, pulmonary hypertension, chronic obstructive pulmonary disease, congestive heart failure, renal failure, atherosclerosis, conditions of reduced blood vessel patency, peripheral vascular disease, vascular disorders inflammatory diseases, stroke, bronchitis, chronic asthma, allergic asthma, allergic rhinitis, glaucoma or diseases characterised by disorders of gut motility.
- 10 12. Use of a compound according to any of Claims 1 to 10, for the manufacture of a medicament for the treatment of stable, unstable and variant angina, hypertension, pulmonary hypertension, chronic obstructive pulmonary disease, congestive heart failure, renal failure, atherosclerosis, conditions of reduced blood vessel patency, peripheral vascular disease, vascular disorders, inflammatory diseases, stroke, 15 bronchitis, chronic asthma, allergic asthma, allergic rhinitis, glaucoma or diseases characterised by disorders of gut motility.
- 20 13. A method of treating stable, unstable and variant angina, hypertension, pulmonary hypertension, chronic obstructive pulmonary disease, congestive heart failure, renal failure, atherosclerosis, conditions of reduced blood vessel patency, peripheral vascular disease, vascular disorders, inflammatory diseases, stroke, bronchitis, chronic asthma, allergic asthma, allergic rhinitis, glaucoma or diseases characterised by disorders of gut motility, in a human or non-human animal body, which 25 method comprises administering to said body a therapeutically effective amount of a compound according to any of Claims 1 to 10.
- 30 14. A pharmaceutical composition comprising a compound of the according to any of Claims 1 to 10, together with a pharmaceutically acceptable diluent or carrier therefor.
- 35 15. A process of preparing a pharmaceutical composition comprising a compound according to any of Claims 1 to 10, which process comprises mixing said compound together with a pharmaceutically acceptable diluent or carrier therefor.

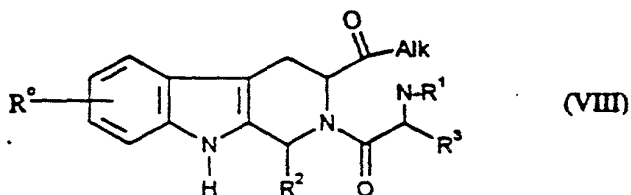
16. A process of preparing a compound of formula (I), which process comprises:

- 5 a process (A) for preparing a compound of formula (I), wherein  $R^3$  represents hydrogen which process (A) comprises treating a compound of formula (II)



10 in which Alk represents  $C_{1-6}$ alkyl and Hal is a halogen atom, with a primary amine  $R^1NH_2$ ; or

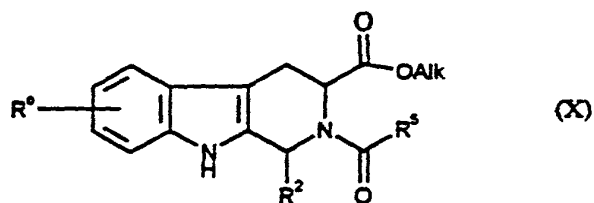
15 a process (B) for preparing a compound of formula (I), wherein  $R^1$  and  $R^3$  together represent a 3- or 4-membered alkyl or alkenyl chain, which process (B) comprises cyclisation of a compound of formula (VIII)



20 wherein Alk represents  $C_{1-6}$ alkyl and  $R^1$  and  $R^3$  together represent a 3- or 4-membered chain both as defined above; or

a process (C) for preparing a compound of formula (I) wherein  $R^3$  represents  $C_{1-3}$ alkyl, which process (C) comprises cyclisation of a compound of formula (X)

83



wherein Alk represents  $C_{1-6}$ alkyl and  $R^5$  represents  $C_{2-5}$ alkyl, substituted at  $C_1$  by a halogen atom; or

5

process (A), (B) or (C) as hereinbefore described followed by

- i) an interconversion step; and/or either
- ii) salt formation; or
- iii) solvate formation.

10

17. Compounds of formulae (II), (III), (V), (VI), (VII), (VIII) and (X), with the exception for compounds (III), (V), (VI) and (VII) wherein  $R^o$  is hydrogen,  $R^2$  is phenyl and Alk is methyl.

15

1066144 658502